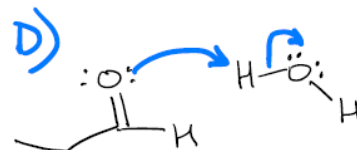
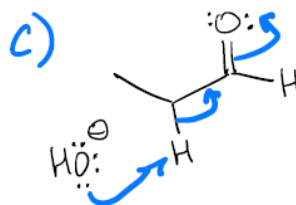
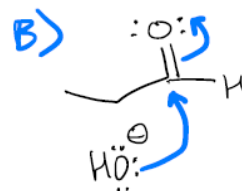
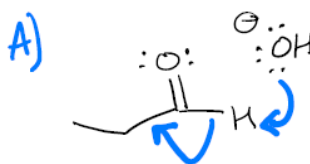
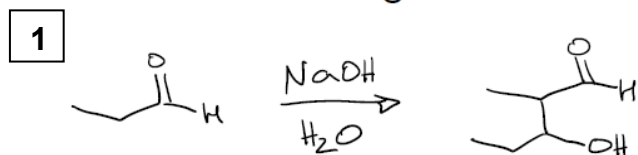
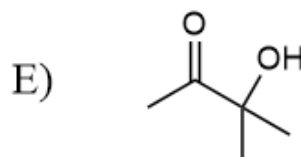
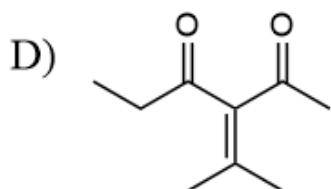
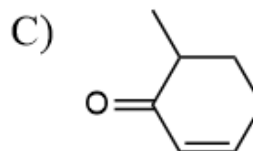
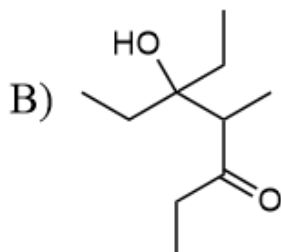
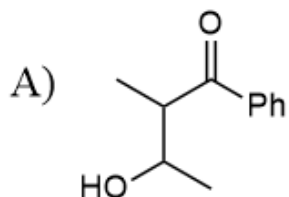




What is the most likely first step in the mechanism for the given reaction?

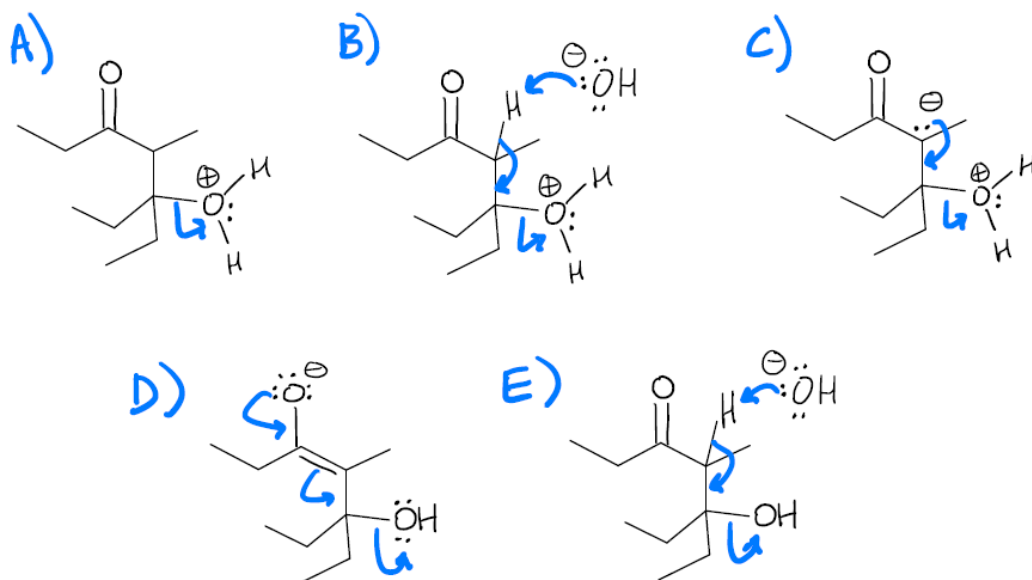


2 Which of the following could NOT be a product of an aldol reaction?



For an aldol condensation conducted with NaOH in water, which of the following steps is likely for the mechanism to lose water?

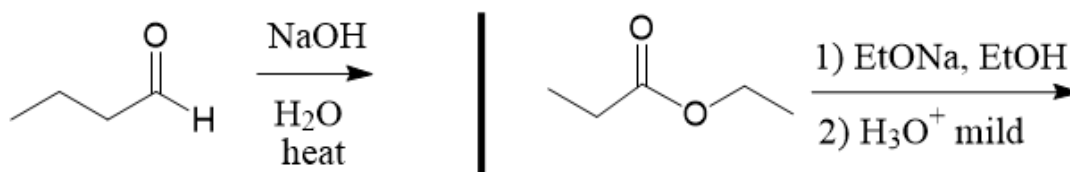
3



4

Predict the major products for the following reactions.

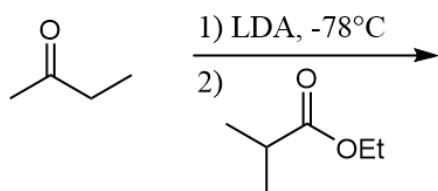
5



Provide a mechanism for the second reaction.

6

Predict the major product.



7

To obtain a neutral product, each of the following reactions requires an acidic aqueous workup EXCEPT:

